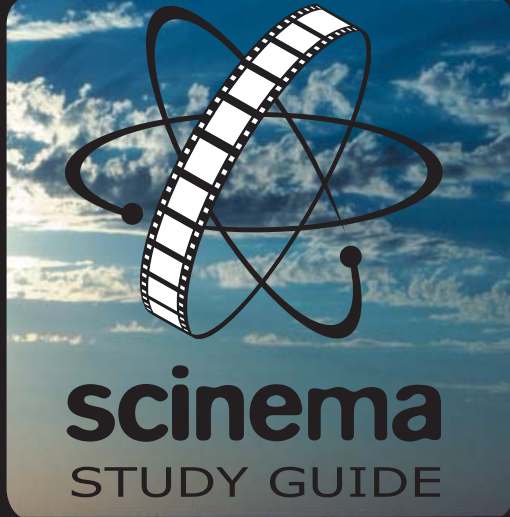




Program Two: Landscapes



The word 'landscape' can be either a noun or an adjective.

As a noun, it can mean

- An expanse of scenery that can be seen in a single view: a desert landscape.
- A picture depicting an expanse of scenery.
- The branch of art dealing with the representation of natural scenery.
- The aspect of the land characteristic of a particular region: a bleak New England winter landscape.
- Grounds that have been landscaped: liked the house especially for its landscape.
- An extensive mental view; an interior prospect: "They occupy the whole landscape of my thought" (James Thurber).

And as an adjective it can mean

- Of or relating to a landscape or landscapes: landscape painting.
- Of or relating to landscaping: a nursery offering landscape services.
- Of or relating to the orientation of a page such that the shorter side runs from top to bottom: printed the document in landscape mode in order to accommodate the wide columns of a table.

Our program 'Landscapes' has three films that deal with very different landscapes: those inside the mind, on another planet, and even a 'land' scape made from water - Antarctica. *What are some of the similarities and differences between the landscapes in these films?*



_grau by Robert Seidel

Described as being on the 'border of science and aesthetics,' *_grau* is a series of flowing, sculptural abstracts which act as a meditation on the nature of memory and reflection and the way memory reacts to stressful and extreme conditions, such as car accidents. In *_grau* these memories are beyond conscious control as past events emerge, fuse, erode and finally, vanish. "Various real sources were distorted, filtered and fitted into a sculptural structure to create not a plain abstract, but a very private snapshot of a whole life within its last seconds," says director Robert Seidel.

The living paintings (Tableaux Vivants) of growing structures branch out over 10:01 minutes (a reference to the binary system by Gottfried Wilhelm Leibniz) without ever

reaching pure black or white respectively. Every element originates from real experiences and is adapted from my sketches, my own body fragments or scientific visualization methods. For example the first, still coloured seconds are the prismatic halos of the collision fading into grey ("grau" in German) The musical framework connects the memories born out of the dramatic moment to clusters. These are unleashed from the image flux partially - to ease the desired, free associations of the beholder.

Activities

Words to spell and learn

- Sculpture
- Accident
- Memory
- Reflection
- Landscape
- Personal
- Experience
- Fluid

Discussion Questions

How does memory work? What is your earliest memory? Can you remember a time when you were stressed or upset? How do you think this may have affected your memory of that time?

Is memory the same for everybody? Is there a reason why memory may work differently for people when they are younger compared to when they are older? What are the things that effect memory?

Which sense do you most strongly connect to memory? For some people this is sight, some it is taste- what is it for you? Why do you think this is?

Individual/Group Projects

Working individually, students can make a dramatic piece, a series of images or a flow chart that creatively illustrates the development of memory. It should initially look at how memory works for humans as a species and then focus on the importance of personal memory.



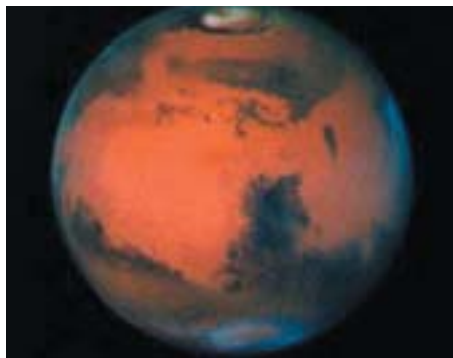
Mars: Dead or Alive

On January 3, 2004, a strange sight unfolded on the planet Mars. Above a vast, dry lake bed south of the Martian equator, a conical vehicle parachuted toward the surface. Then, just before touch down, it was enveloped by a gigantic protective airbag allowing the craft to bounce safely to a stop. Inside was Spirit, the most sophisticated rover ever launched from Earth. "MARS Dead or Alive," which originally aired just hours after Spirit landed on the red planet, covers this mission in depth. The program's behind-the-scenes look at the construction of Spirit and its twin, Opportunity, includes a special up-to-the-minute segment with the latest news from Mars as of January 3, 2004—to learn if Spirit is ready to undertake the most comprehensive search for evidence of liquid water ever attempted on Mars

Activities

Words to spell and learn

Launch
Martian
Mission
Rover
Crater
Exploration
Engineer
Scientist
Countdown
Satellite
Propulsion



Discussion Questions

What is NASA's objective in sending these rovers to Mars? Why is space exploration important? Is it still important?

In the past 40 years, more than 50% of the missions to Mars have failed. How did Steve Squyres and the NASA engineers avoid a similar fate with the MERs?

If we discovered that Mars was capable of sustaining life forms, like ourselves, would we all just pack up and move there? If we discovered other planets in our solar system were habitable, would you be interested in holidaying or residing there? What might a future with the option of holidaying on another planet be like?

Individual/Group Projects

Students work in small groups where some are assigned the role of scientists and some of engineers. In a group discussion, they have to pinpoint something about our world or our universe that is yet to be discovered, or proven scientifically. They then have to plan how they would design this project with everyone working in their respective fields. When they have finished their design project the group then presents to the class in the form of a business proposal. The class has to be convinced that the project is important and is worthy of investment.

Using printed, on-line or audio-visual resources to learn about scientific exploration and the roles of scientists and engineers now and in the future, students should attempt to answer the following questions:

Is space the final frontier or is there more to learn about earth that has not yet been discovered?

What is the role of a scientist compared to that of an engineer?

What is the most important scientific discovery to have been made in your lifetime?

Miracle Continent – Antarctica

After a century of research, studies have determined that Antarctica has a tremendous impact on the global environment. In particular, scientists are extremely interested in the role of a massive ice sheet that covers the entire continent. Our crew joins a team of British scientists to reveal that enormous amounts of dense cold water originating under the Antarctic ice shelf are cooling the world's oceans. Moreover, the extremely unstable ice on the western side of the continent could threaten the earth's climate as it melts under accelerated global warming.

Activities

Words to spell and learn

Antarctica
Continent
Frontier
Volcano
Barren
Ice-shelf
Iceberg
Research
Station

Discussion Questions

How can Antarctica be both barren and thriving at the same time? Give examples.

What does global warming mean to Antarctica? What kind of effect does the cold water from beneath Antarctica's massive ice sheet have on the world's oceans? What would it mean to the rest of the world if the ice on the western side of the continent melted?

What is the 'Antarctic Treaty'? What does it aim to do?

Individual/Group Projects

Students work alone or in small groups re-write a modern, two-page version of the 'Antarctic Treaty.' Despite the distance and lack of permanent human residents, Antarctica is a critical part of the world's delicate ecology. Given what we now know about global warming and climate change, how would you alter the laws that govern Antarctica to benefit both Antarctica and the wider world? Students can use printed or on-line resources to learn about global warming, to research the original Antarctic Treaty and to investigate why the survival of Antarctica is important for the rest of the world.

As students research and re-write the Antarctic Treaty, they should try to answer four questions:

How should a land that has no permanent human population be governed? What are the critical challenges now facing Antarctica?

Can these challenges be overcome? How?

What is the rest of the world currently doing to avoid an environmental crisis and protect wildernesses like Antarctica?

Further Reading and Resources

An Update on Global Warming

[<http://www.ncdc.noaa.gov/gblwrmupd/global.html>]

Study guide prepared by Jacinta Woodhead for SCINEMA 2005. See the SCINEMA website for further information www.csiro.au/scinema